

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claims 1-16 (Canceled)

Claim 17 (Currently Amended): A process for treating biological targets within the fluid of a biological organism, comprising the steps of:

(a) feeding a fluid into an assembly comprising an inlet connected to receive a flow of the fluid, and an outlet connected to pass the flow of the fluid from the assembly, wherein said assembly ~~is comprised of~~ comprises a first chamber and a second chamber, wherein said first chamber ~~has an inner wall comprised of~~ comprises a target specific binding agent, wherein said fluid comprises a biological target ~~and said first chamber is disposed within a second chamber, and~~

(b) modifying the flow dynamics of said fluid by introducing a first portion of the flow of the fluid to the first chamber, and a second portion of the flow of the fluid to the second chamber ~~allowing said target specific binding agent to bind with said biological target,~~

(c) ~~causing said biological target within said fluid to migrate into a capture zone wherein said capture zone is disposed within said second chamber.~~

Claim 18 (Currently Amended): The process ~~as recited in~~ according to claim 17, wherein said biological target is independently selected from the group consisting of

circulating progenitor cells, ~~stems~~ stem cells, metastatic cancer cells, human immunodeficiency virus infected cells, viruses, virus infected cells, macrophages, bacteria, bacteria-infected cells, leukocytes, neutrophils, and mixtures thereof.

Claim 19 (Currently Amended): The process ~~as recited in~~ according to claim 17, wherein said biological target comprises a stem cell.

Claim 20 (Currently Amended): The process ~~as recited in~~ according to claim 19, wherein a morphological characteristic of said biological target is modified in such a way so as to differentiate said biological target after the target specific binding agent binds with the biological target.

Claim 21 (Currently Amended): The process ~~as recited in~~ according to claim 17, wherein a morphological characteristic of said biological target is modified in such a way so as to devitalize the biological target after the target specific binding agent binds with the biological target.

Claim 22 (Currently Amended): The process ~~as recited in~~ according to claim 35, 19, wherein said each of said biological target is removed from said capture zone ~~second~~ chamber.

Claim 23 (Currently Amended): The process ~~as recited in~~ according to claim 18, wherein said an inner wall of the first chamber comprises ~~is comprised of~~ pores with a pore size of at least about 1 micron.

Claim 24 (Currently Amended): The process ~~as recited in~~ according to claim 19, wherein said first chamber and said second chamber are concentric.

Claim 25 (Currently Amended): The process ~~as recited in~~ according to claim 17, wherein said assembly further comprises a third chamber.

Claim 26 (Currently Amended): The process ~~as recited in~~ according to claim 17, wherein said an inner wall of the first chamber is permeable to said biological target.

Claim 27 (Canceled)

Claim 28 (Currently Amended): The process ~~as recited in~~ according to claim 25, 27, wherein said third chamber has an inner wall ~~comprised of~~ comprising a target specific binding agent.

Claim 29 (Currently Amended): The process ~~as recited in~~ according to claim 25, wherein said third chamber is disposed within said first chamber.

Claim 30 (Currently Amended): The process ~~as recited in~~ according to claim 29, wherein said third chamber has an inner wall ~~comprised of~~ comprising a target specific binding agent.

Claim 31 (Canceled)

Claim 32 (New): The process according to claim 17, further comprising a step of implanting the assembly in a biological organism.

Claim 33 (New): The process according to claim 17, wherein the inlet is in fluid communication with a circulating flow of the fluid.

Claim 34 (New): The process according to claim 17, wherein the second chamber defines a hollow flow path extending through the assembly.

Claim 35 (New): The process according to claim 17, wherein the inlet is disposed at an end of the assembly, and the outlet is disposed at an opposite end of the assembly.

Claim 36 (New): The process according to claim 17, further comprising a step of causing said biological target within said fluid to migrate into a capture zone.

Claim 37 (New): The process according to claim 17, further comprising binding the biological target with the target specific binding agent.